

REMARKS

Drawings

New corrected drawings have been herewith and provide formal versions of the previously submitted informal drawings 1-13 on 10 sheets forming an Appendix hereto.

Claim Rejections 35 U.S.C. §102

Claims 19-23 and 27-31 have been cancelled so as to provide a single set of corresponding method and apparatus claims to simplify the prosecution of this application. The remaining claims have been amended to more clearly indicate that "agents" are "self-organizing autonomous control units".

The present invention provides a graphical programming environment for programming (Autonomous Control Unit) ACU devices. Such devices allow industrial processes to organize themselves through a bidding process among ACUs. See generally paragraph [0007] of the present application.

For the purpose of this bidding, each ACU must be associated with a particular physical machine that it represents in the bidding process. Accordingly, the present invention provides a graphical programming environment that allows a user to both select particular ACU programming using templates and to associate that ACU program with particular controlled devices that they will represent in the bidding process. See generally paragraph [0014] of the present application.

The Nixon reference teaches a graphical language that may be used in a control environment and to this extent has some similarities with the present invention. Nevertheless, the Nixon device (1) does not teach a graphical programming environment for ACU-type systems, as now noted in the claims, and, (2) as a consequence, is indifferent to an assignment between particular ACU and the controlled device that the ACUs represents for bidding, using graphical techniques, as is also claimed. Note that latter association is distinguishable from the association of a particular ACU or control code with inputs and outputs connected to a particular machines or the association of an ACU or control code with a particular processor on which the ACU or control code will run.

In this regard, further mention is also made of claim 10 and similar claim 24 that require the graphical programming environment to also allow assignment of the autonomous control unit to a particular controller on which it will run, independent of the machine the

ACU will represent for bidding. While it is not clear that the Nixon reference teaches a graphic language that allows for the distribution of control code to distributed machines, it is clear that the Nixon reference does not teach both the identification of a program to a particular machine for which it is responsible for negotiation and to a separate machine on which it will run.

For these reasons, it is believed that claim 1 and 24 now distinguish over the Nixon reference.

The remaining claims should also be allowable based on the allowability of the independent claims on which they are dependent.

In light of these comments and remarks, it is believed that claims 1-18 and 24-26 are now in condition for allowance and allowance is respectfully requested.

Respectfully submitted,

RAYMOND J. STARON

By: 

Keith M. Baxter

Reg. No. 31,233

Attorney for Applicant

Boyle Fredrickson Newholm Stein & Gratz, S.C.

250 East Wisconsin Avenue, Suite 1030

Milwaukee, WI 53202